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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,656	11/29/2001	Yosuke Kusaka	111231	2644

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EXAMINER

AGGARWAL, YOGESH K

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/995,656

Applicant(s)

KUSAKA, YOSUKE

Examiner

Yogesh K. Aggarwal

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-11,13,15 and 17-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-11,13,15 and 17-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/09/2005 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 8-11, 13, 15 and 17-22 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 8-10, 15, 17, 19, 20 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Kiyokawa (US Patent # 6,204,877).

[Claims 8 and 15]

Kiyokawa teaches an image-capturing device (figure 8, slave side camera transmitting image data), comprising an image sensor (figure 2b, image pickup circuit 5) that captures a subject image and generates image data (col. 3 lines 61-65); an operation member (figure 3, trigger switch 45) that operates to cause the image sensor to capture a subject image and generate image

Art Unit: 2615

data (col. 6 lines 49-50), a memory (IC card memory 19 that is detachable) and an image storage control unit (controller 20) that controls transfer of image data and is operable in a communication mode to automatically transfer image data generated by the image sensor to an external device (figure 8, master side camera receiving image data) via a communication circuit (figure 2b, data input/output section 27) capable of communicating with the external device to store the image data in the external device, and if the external device is substantially unusable to transfer image data generated by the image sensor to the memory (col. 9 lines 18-54, figure 8). It would be inherent that once the image data is stored in the memory the operation member 45 can be operated to cause the image sensor to capture a next subject image.

[Claims 9, 19, 20]

Kiyokawa teaches that the IC memory card 19 is detachably mounted in the image-capturing device (col. 4 lines 26-29).

[Claim 10]

Kiyokawa teaches that the slave device checks at step S52 (figure 8), if an "image data transmission stop command is transmitted" and if so it stops transmission of the image data (step S53) and stores the image data in the memory (step S54, col. 9 lines 33-45, figure 8).

[Claim 17]

Kiyokawa teaches in step S52 (figure 8) that if an "image data transmission stop command is transmitted" were not generated (NO LOOP) then the image would be transmitted (step S51) and therefore would not be stored in the memory.

[Claim 21]

Art Unit: 2615

Kiyokawa teaches at step S55 (figure 8) to transfer the image data to the master side when it becomes usable.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 22 is rejected under 35 U.S.C. 102(b) as being anticipated by Moronaga et al. (US Patent # 5,956,084).

[Claim 22]

Moronaga et al. teaches an image-capturing device (figure 1), comprising an image sensor (CCD 38) that captures a subject image and generates image data; an operation member (11) that is operated to cause the image sensor to capture a subject image and generate image data; a memory (28), a setting unit (20) that sets either the memory (28) or an external device (31) as a storage device where image data generated by the image sensor is to be stored (col. 9 lines 35-43); a communication circuit (42) capable of communicating with the external device, an image storage control unit (44) that controls transfer of image data, to transfer image data generated by the image sensor to the memory in the case that the memory is set as the storage device, to transfer image data generated by the image sensor to the external device via a communication circuit in the case that the external device is set as the storage device (col. 9 lines 35-44), and to transfer image data generated by the image sensor to the memory in the case that the external device is set as the storage device and the external device is substantially unusable, so that the

Art Unit: 2615

operation device can be operated to cause the image sensor to capture a next subject image (col. 12 line 63-col. 13 line 22, figure 3c).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kiyokawa (US Patent # 6,204,877) in view of Niwa (US Patent # 6538692).

[Claim 11]

Kiyokawa teaches the limitations of claim 8 but fails to teach wherein image storage control unit detects whether or not a storage capacity of the external device is sufficient and transfers the image data generated by the image sensor to the memory if the storage capacity of the external device is detected to be insufficient.

However Niwa teaches an image recording medium (figure 2, CCD camera 2) having an external recording medium, a unit separate from the image recording medium, coded data is written on the external recording medium 12, space available on the external medium is reduced and, eventually, the available space on the external recording medium 12 becomes less than the amount of coded picture data to be recorded next. At this time, the determination module 30 sends the write disable signal to the external R/W controller 10, and the write enable signal to the internal R/W controller 22. The determination module 30 sends these control signals each time it detects such a condition. These signals prevent coded picture data from being written on the

Art Unit: 2615

external recording medium 12 and cause it to be written into the internal memory 24. Coded picture data is written into the internal memory 24 until a user issues a stop instruction or until the internal memory 24 becomes full (col. 6 line 55-col. 7 line 5) in order to provide a data storage control method and system that prevent a situation in which recording is interrupted because an external medium becomes full before all intended data is recorded.

Therefore taking the combined teachings of Kiyokawa and Niwa it would have been obvious to one skilled in the art at the time of the invention to have been motivated to have an image storage control unit detects whether or not a storage capacity of the external device is sufficient and keeps the image data within the image-capturing device if the storage capacity of the external device is detected to be insufficient as taught in Niwa in order to provide a data storage control method and system that prevent a situation in which recording is interrupted because an external medium becomes full before all intended data is recorded.

9. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kiyokawa (US Patent # 6,204,877) in view of Cook (US Patent # 6,788,332).

[Claim 11]

Kiyokawa teaches the limitations of claim 8 but fails to teach a wireless communication medium. However Cook teaches a device 10 (figure 1) having a digital camera (11) with a wireless transceiver (22) in order to transmit images wirelessly (col. 2 lines 34-38).

Therefore taking the combined teachings of Kiyokawa and Cook it would have been obvious to one skilled in the art at the time of the invention to have been motivated to have a wireless transceiver inside a digital camera. The benefit of doing so would be to make the digital

Art Unit: 2615

camera portable as taught in Cook (col. 2 line 20) which means it can be used to transmit images from a rough terrain to a PC wirelessly where no landlines are available

10. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nanba (US Patent # 6,297,870), Goto (US Patent # 5,889,273) and in further view of Moronaga et al. (US Patent # 5,956,084).

[Claim 13]

Nanba discloses an image-capturing device that is an electronic camera (figure 4) comprising an image sensor (303) that captures a subject image and generates image data (col. 4 lines 28-30), a buffer memory (209) that temporarily stores the image data (col. 5 lines 43-49), a connection unit (212) that is a slot (figure 3, element 17) that electrically and detachably connects a portable memory that is a memory card (8) to a main body (col. 5 lines 66-67), a USB communication circuit (213) capable of communicating with an external device (col. 6 lines 1-3). It would be obvious that an image storage control unit (211) will store the image data temporarily into a buffer memory (209) and transfer it directly and automatically into the portable memory (8) connected at said connection unit (212). Nanba also teaches transferring the image data temporarily stored at said buffer memory to the portable memory 8 if it is connected at said connection unit (col. 7 line 21-col. 8 line 23, figures 6A-6B). It would be obvious that the image data will be transferred to an external device only if the communication circuit is connected to the camera.

Nanba teaches that the communication I/F 213 is an interface based on, for example, the USB standard, or any other interface for communication for externally connecting to the device like a PC 1000 (col. 6 lines 1-3) but fails to teach a portable memory card device that functions

Art Unit: 2615

as either a portable memory or a wireless communication circuit capable of wirelessly communicating with an external device and an image storage control unit that controls transfer of image data to automatically and directly transfer the image data generated by the image sensor to the portable memory if the portable memory is connected at the connection unit.

However Goto teaches an IC card (figure 1) that is well known to one skilled in the art to be used in cameras as a detachable and portable external memory device. Goto further teaches that the IC card be used to store data (data memory 11) and wirelessly transfer data to an external device like a PC via a card-read writer connected to PC (col. 3 line 9-col. 4 line 9).

Therefore taking the combined teachings of Nanba and Goto, it would be obvious to one skilled in the art at the time of the invention to have been motivated to use the IC card of Goto into the slot provided in the camera of Nanba to have a portable memory card device that functions as either a portable memory or a wireless communication circuit capable of wirelessly communicating with an external device. The benefit of doing so would be to have a memory card and a wireless device be configured on a semiconductor integrated circuit so as to reduce a circuit size on one hand and to realize a small package on the other hand.

Nanba in view of Goto fails to teach an image storage control unit that controls transfer of image data to automatically and directly transfer the image data generated by the image sensor to the portable memory if the portable memory is connected at the connection unit.

However Moronaga et al. teach an electronic still video camera having an internal RAM (figures 4 and 5, element 28) be directly transferred automatically to an external RAM via switch 116 and 153 when the internal frame is full (col. 14 lines 9-31).

Art Unit: 2615

Therefore taking the combined teachings of Nanba, Goto and Moronaga, it would be obvious to one skilled in the art at the time of the invention to have been motivated to have an image storage control unit that controls transfer of image data to automatically and directly transfer the image data generated by the image sensor to a portable memory if the portable memory is connected at the connection unit in order to have the operation of data transfer attained in a simplified manner.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yogesh K. Aggarwal whose telephone number is (571) 272-7360. The examiner can normally be reached on M-F 9:00AM-5:30PM.

11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571)-272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YKA
October 11, 2005


DAVID L. OMETZ
SUPERVISORY PATENT
EXAMINER